

CLAIM AMENDMENTS:

1. (original) A method of producing a polygonal, ring-shaped machine part having a complex cross-section from a metal rod, comprising the steps of:

A₁) forging the rod material to prepare a long notched blank 1 having large diameter parts 11, the number of which corresponds to the number of the parts to be bent, and the remaining small diameter parts 12;

B₁) bending the large diameter parts 11 of the above long blank 1 to form a first intermediate 3 of polygonal, open ring-shape with confronting ends;

C₁) butting and welding the confronting ends of the above ring-shaped first intermediate 3 to form a polygonal, closed ring-shaped second intermediate 5;

D₁) die-forging the above closed ring-shaped second intermediate 5 to form a polygonal, ring-shaped product 7 having a complex cross-section; and

E₁) subjecting the above polygonal, ring-shaped product 7 to necessary finishing step such as machining to obtain a polygonal, ring-shaped machine part 8 having a complex cross-section.

2. (original) A method of producing a polygonal, ring-shaped machine part having a complex cross-section from a metal rod, comprising the steps of:

A₂) forging the rod material to prepare two short notched blanks 2 having large diameter parts 21, the number of which corresponds to half of the parts to be bent, and the remaining small diameter parts 22;

B₂) bending the large diameter parts 21 of the above short blanks 2 to form an intermediate 4 of square U-shape, which is a half of the final product;

C₂) butting the ends of the above two square U-shaped intermediates 4 and welding the confronting ends to form a polygonal, closed ring-shaped second intermediate 6;

D₂) die-forging the above closed ring-shaped second intermediate 6 to form a polygonal, ring-shaped product 7 having a complex cross-section; and

E₂) subjecting the above polygonal, ring-shaped product 7 to necessary finishing step or steps such as machining to obtain a polygonal, ring-shaped part 8 having a complex cross-section.

3. (currently amended) The method of producing according to claim 1 ~~or claim 2~~, wherein the long notched blank 1 or the short notched blank 2 is prepared by using a rotary forging machine.

4. (currently amended) The method of producing according to claim 1 ~~or claim 2~~, wherein the welding is carried out by flash butt welding.

5. (currently amended) A polygonal, ring-shaped machine part having a complex cross-section, which is a frame for transition piece of a gas turbine produced by the method according to claim 1 ~~or claim 2~~.

6. (new) The method of producing according to claim 2, wherein the long notched blank 1 or the short notched blank 2 is prepared by using a rotary forging machine.

7. (new) The method of producing according to claim 2, wherein the welding is carried out by flash butt welding.

8. (new) A polygonal, ring-shaped machine part having a complex cross-section, which is a frame for transition piece of a gas turbine produced by the method according to claim 2.